Subject: WIPP PMRs

From: Penny McMullen pmsl@osogrande.com>

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To: Steve Zappe <steve_zappe@nmenv.state.nm.us>



COMMENTS ON WIPP PERMIT MODIFICATION REQUESTS by Penelope McMullen for the Loretto Community July 14, 2003

Mr. Steve Zappe New Mexico Environmental Dept. 2905 Rodeo Park Drive East, Building 1 Santa Fe, NM 87505-6303



Dear Mr. Zappe:

The Loretto Community submits the following comments on DOE's WIPP permit modification requests:

1. **Removal of Underground Booster Fans**: We urge NMED to deny this request.

This PMR does not answer the questions that were asked when the request was a class 1 PMR (and denied). I would recommend leaving them intact just in case a failure should occur in the ventilation system. WIPP has plenty of space, so removal need not be a priority.

2. **Drum Age Criteria (DAC) for New Containers**: We urge NMED to deny this request.

For the class 2 PMR previously requested for DAC, NMED ruled that it needed to follow class 3 procedures. So this DAC request for the new larger containers must also be a class 3 request, with procedures for a public hearing.

Since all the experiments have been conducted on smaller containers, new experiments need to be conducted for each of the larger containers. We have no evidence that the characterization techniques used on smaller containers are appropriate for the larger containers.

3. Eliminating Headspace Sampling for Sealed-Sources Waste We urge NMED to deny this request.

This also should be a class 3 request because it is a substantial change that merits a public hearing.

This proposal is relying on "acceptable knowledge" (AK) which is not "acceptable" to the public because of its known inadequacies and LANL's poor record keeping. DOE wants us to take their word for it that the sealed sources do not contain VOCs. We have difficulty believing that without some proof, given the DOE's history of secrecy and lying.

Many of the sealed sources contain nondefense wastes which are prohibited at WIPP. DOE claims that LANL will determine which sealed sources contain nondefense waste and promises that they will not send those to WIPP. However, the PMR does not explain how LANL will make that determination, so we cannot trust that it will be done correctly.

DOE says that headspace gas sampling would destroy the sealed source. I cannot believe that with today's technology there are no ways to take a sample without destroying the capsule.

At the public meeting we heard that DOE headquarters' plans to add new items to the list of materials that go into sealed sources. Since we don't know what these future items might be, NMED should deny changes to sealed-source procedures.

4. Removal of Formaldehyde as a Required Analyte at LANL: We urge NMED to deny this request.

LANL provides only "acceptable knowledge" (AK) documentation to indicate that no unused, off-specification or spill residues of formaldehyde are present in any LANL TRU waste streams" (G-2). Since AK is not always accurate, especially for older waste, we think they need to do actual sampling to make this determination.

Also, we are not convinced that LANL would not in the future have residues of formaldehyde in their TRU waste streams, so we do not want it taken off the list of analytes to be tested for before waste is sent to WIPP.

5. Addition of Hazardous Waste Numbers: We urge NMED to deny this request.

Since we are convinced that WIPP is not really a safe depository, we would not want to see any new waste numbers sent there. See reasons listed under #6.

The PMR does not adequately show that the new waste numbers will not adversely affect the environment or human health.

We especially do not want D033 (hexachlorobutadiene) to be approved. It is potentially incompatible with other materials approved for WIPP, and significantly large amounts of D033 could go to WIPP if this change is approved.

Therefore D033 needs to be specifically tested in combination with each of the other materials to determine its compatibility before NMED can consider this request.

6. Construction and Use of Disposal Units: We urge NMED to deny this request.

The existing permit allows for the use of Panels 1, 2 and 3. Since it took three years to fill Panel 1 (with 3 rooms not used), and the existing permit is for 10 years, we do not believe that the need for more than the remaining two panels has been adequately proven. DOE says the accelerated cleanup program is the reason that WIPP will fill up more quickly. However, some of the sites have objections to the Performance Management Plans which are the basis for the accelerated cleanup, so shipping rates may not increase.

The Loretto Community does not believe that WIPP is a safe depository for waste that needs to be contained for longer than the human race has been known to exist. Therefore, we cannot approve of the construction of new panels.

When WIPP was chosen as a waste site, the decision was based on the belief that the

salt beds were dry. We now know that the salt is wet, which corrodes containers more quickly, and with the karst conditions underground, could spread any leakage into the ground water. The Rustler aquifer sits above the WIPP site, and pressurized brine reservoirs are under it, adding to the danger.

WIPP was opened despite the objections of Charles Lotus, the former Project Engineer for the U.S. Army Corp Engineers at WIPP, who held the responsibility of checking safety problems. Mr. Loftus explained in detail that there were 30 major changes that still needed to be made before he could consider WIPP safe enough to open. He described problems with air locks, the floor coating for the waste handling building, the RH area, the Hot Cell, the stairwell from RH receiving area, sealing for rooms (he recommended a temporary support system to hold the salt blocks in place until the ceilings collapse), the void left after a ceiling collapse, and the filter building. If NMED has not seen his statements sent to the DOE, I could provide a copy.

Another issue that has not been adequately addressed is that of transportation. There have already been several accidents and incidences of leakage from the TRUpact containers. It would be much safer for each generator site to permanently dispose of its own waste at its own site. Copied below is the statement I issued after thoroughly studying the transportation problems.

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NUCLEAR TRANSPORTATION

Transportation of radioactive waste cannot be made totally safe. The DOE expects that there will be a number of transportation accidents, and has admitted that some accidents will release radiation. New Mexico has one of the highest DWI accident rate of the nation. The NM State Police reported that in 1988, there was an average of one accident nearly every week involving vehicles carrying hazardous waste. As the number of transports has increased, I expect that the number of accidents has also increased.

Two recent accidents involved WIPP-bound trucks. In the first, a drunk driver rear-ended the truck. The waste went to WIPP but the workers found contamination in the TRUPACT-II and the waste was sent back to the site it came from. In the second accident, the driver blacked out. That waste was also sent back because DOE was afraid of possible TRUPACT contamination. With RH-TRU waste, I would expect the contamination to be worse.

In the event of a nuclear accident, even the dust in the area will be contaminated. When the dust is inhaled or ingested by people living or working in that area, those people will contract cancer. Cancer is not the only health risk. Studies show that radiation damages genes which result in sterility and birth defects. These damaged genes are then passed on to succeeding generations.

The Health Workers Union reports that they have not been adequately trained to deal with nuclear accidents, and hospitals along the routes are not equipped to deal with de-contamination. Every community along the routes needs a self-contained hospital unit where people can be isolated, tested and washed, and where even the water used for washing will need to be contained so it will not contaminate the community's sewer system. All persons who may have to respond, within each and every section of the route needs to receive full and extensive training. Sufficient equipment and clothing should be provided in every area. Two paper suits for the entire city of Santa Fe is criminal -- does anyone really believe only 2 people will be needed to respond to an accident near Santa Fe?

Paper suits are not sufficient anyway. Paper stops alpha particles but not beta or gamma rays. Alpha particles are fatal if breathed or ingested. Most of the Chernobyl clean-up workers are now dead.

And what about all the other people in the area? Everyone living or working within a 5 mile radius all along every route should also be provided with sufficient protective clothing and masks.

Geiger counters and alpha particle detectors need to be stored for easy access all along the routes. Alpha particle detectors, though quite expensive, are necessary because plutonium emits alpha particles which cannot be detected by Geiger counters, and just one alpha particle breathed in by either a volunteer or innocent bystander will produce

cancer in that person. While some of the equipment will be in the trucks, we cannot rely on that because they could be damaged in a serious accident.

Should a fire occur, a plutonium fire cannot be put out with water -- it needs sand. Every fire department will need to be supplied with a sufficient amount of sand to handle a serious accident involving fire.

Where is the funding for all of this preparation? Where is the funding for this kind of clean-up operation needed after an accident? And is there automatic, full cancer insurance for all persons exposed during a nuclear transportation accident?

The DOE has also admitted that radiation is emitted from the TRUpact containers within a 5 mile radius as they pass through our towns, even without accidents. The DOE claims that this amount of radiation will be harmless.

However, most scientists today agree that the effects of low-level radiation ARE much more serious than we were originally aware of -- 1000 times more damaging than is commonly believed. Many scientists agree with Dr. Bertell that there is NO level of radiation exposure that can be called truly safe when it is continuous over a specific area. This is because radiation has a cumulative effect, commonly called the Petcau effect after the study conducted by the Canadian Atomic Energy Dept, which found that radiation builds in the human body each time it is exposed.

Each of us who lives or works or goes to school along a nuclear transportation route, or who comes near a vehicle on the roads transporting nuclear materials, is exposed again and again and again, until the radiation build-up produces cancer in

our bodies. Children, pregnant women and senior citizens are especially susceptible.

When I lived in New York, I worked with Dr. Bertell who is internationally recognized for her research on the effects of low-level radiation. When Dr. Bertell first began publishing her results showing that low-level radiation is much more lethal than previously thought, her government funding was cut off because government officials did not want such results to reach the American public. A shocking number of other scientists also lost their funding or their jobs when they started reporting similar results, and a few have survived suspicious life-threatening "accidents."

Dr. Robert March's testimony on April 9, 1990, (WIPP route hearing) included evidence of the U.S. government's pattern of deliberately keeping the health effects of radiation secret from the American public. Dr. Bertell uncovered an Atomic Energy Commission memo which recommended suppression of studies by Public Health Services because they "would cause adverse public reaction and law suits, and would jeopardize the testing program." Dr. Bertell also discovered case after case where the DOE lied to people involved in nuclear work. Many of us in the general public can no longer believe the DOE.

The Dept. of Transportation guidelines stress that "the State adequately consider public

risk to all those who may be affected by radioactive material transportation." The numerous safeguards listed above for such transportation have not been followed and therefore transporting nuclear waste is no where near safe.

Given all the testimony about the dangers of transporting radio-active material, it makes much more sense to store hazardous waste at the site where it is generated, in visible above-ground, constantly monitored, leak-proof encasements. It is not only safer, it is also more cost effective. And given the lack of preparedness, it is also the only moral alternative.